

THE FORMAL EMPLOYMENT OF DISABLED PEOPLE IS NOT SPECIFICALLY DETERMINED BY ECONOMIC FACTORS BUT BY DIRECT TECHNICAL ONES OR ULTIMATELY BY SOCIAL INTERESTS AND VALUES. A SOLUTION, NEUTRAL IN ECONOMIC TERMS AND ACHIEVABLE IN TECHNICAL TERMS, TO THE PROBLEMS HINDERING THE EMPLOYMENT OF PEOPLE WITH DISABILITIES AND HEALTH CONDITIONS WOULD BE A REALISTIC TECHNICAL SOLUTION AND ACTUAL EMPLOYMENT, BUT ONLY IF THE SOCIETY MAKING THE RELEVANT DECISIONS AND AIMING FOR THE INCLUSION OF DISABLED PERSONS. IN A PERIOD OF ECONOMIC UPTURN WITH A HUGE EXPANSION OF THE LABOUR FORCE, HIGHER EMPLOYMENT RATES APPEAR NOT ONLY AMONG NON-DISABLED PERSONS BUT ALSO AMONG PEOPLE WITH DISABILITIES AND HEALTH CONDITIONS. HOWEVER, ONCE AN ECONOMIC DOWNTURN OCCURS AND THE DEMAND FOR LABOUR FALLS WE SEE THE APPEARANCE OF GROUPS THAT 'CANNOT BE

EMPLOYED IN A PROFITABLE MANNER'. THESE GROUPS INCLUDE NOT ONLY PEOPLE WITH **DISABILITIES** AND HEALTH CONDITIONS BUT ALSO UNSKILLED WORKERS, LONG-DISTANCE COMMUTERS, WOMEN WITH NO MORE THAN SECONDARY SCHOOL GRADUATION, IMMIGRANTS, THE ROMA MINORITY AND OTHERS, IN OTHER WORDS, ALL GROUPS IN A WEAK SOCIAL POSITION, TO WHOSE DETRIMENT IT IS EASIER TO IMPLEMENT **DISMISSALS**, OR WHO CAN SAFELY BE BLAMED FOR ANY DECLINING EFFICIENCY OF COMPANY OUTPUT. AS FINDING A JOB IS INCREASINGLY DIFFICULT IN GENERAL SO THOSE LABOUR GROUPS THAT ARE UNABLE TO PROTECT THEMSELVES ARE EXCLUDED FROM THE LABOUR MARKET WHILE INTENSIVE EFFORTS ARE MADE TO SERVE THE INTERESTS OF THOSE WHO BENEFIT FROM THIS **EXCLUSION**, WITH THE SUGGESTION OF SOME IDEOLOGY. IN THIS CONTEXT, THE LOSERS IN THIS GAME ARE GIVEN A LABEL TO LEGITIMISE THE SITUATION OR FOR SOME IDEOLOGICAL PURPOSES. LABELS SUCH AS 'LAZY', 'DRIFTER', 'LUMPEN ELEMENTS', OR NEGATIVE PERCEPTIONS OF PEOPLE WITH **DISABILITIES** OR HEALTH CONDITIONS ALSO SERVE TO DISGUISE THE

FACT THAT UNEMPLOYMENT IS ROOTED IN MACROECONOMIC AND SOCIAL INEQUALITIES LYING BEHIND THE DIRECT CAUSES. IT IS OBVIOUS THAT ONLY THOSE IN A VULNERABLE POSITION ARE EXCLUDED FROM THE LABOUR MARKET OR ALREADY EXCLUDED FROM IT. FOR SOME OF THOSE EXCLUDED, DEVIANCE IS NOT ONLY A REASON FOR, BUT ALSO A CONSEQUENCE OF, THE FAILURE OF BOTH THE LABOUR MARKET AND SOCIETY. TO THE SAME EXTENT. WHEN ACCOUNTING FOR LABOUR MARKET SUCCESSES AND FAILURES, PUTTING INDIVIDUAL EXCELLENCE OR FAULT TO THE FORE SERVES TO FACILITATE THE EXCLUSION OF SOCIAL GROUPS UNABLE TO DEFEND THEMSELVES WITHIN THE LABOUR ENVIRONMENT. THIS UPSIDE-DOWN LOGIC IS ALL THE MORE DANGEROUS AS MANY DISABLED PEOPLE, AND GENERALLY ALL THOSE IN A MARGINALISED POSITION, BELIEVE THAT THE FAULT LIES WITH THEM. THE RESULTING FRUSTRATION REINFORCES HARMFUL BEHAVIOUR SUCH AS ALCOHOLISM, CRIME AND VOLUNTARY DROPPING OUT FROM THE LABOUR MARKET. FOR DISABLED PERSONS, EMPLOYMENT MAY CONTRIBUTE TO A LOWER PUBLIC BURDEN IN THE SAME WAY AS WOULD THEIR BETTER SOCIAL INCLUSION. ARGUING FOR THE MANY-SIDED NECESSITY OF EMPLOYMENT, TEGYEY SUMMARISED HIS VIEW AS FOLLOWS: 'IN THE EMPLOYMENT OF THE DISABLED WITH REDUCED WORKING CAPACITY, IT MUST BE ENSURED TO GIVE THEM THE MOST APPROPRIATE JOB OPPORTUNITY DESPITE THEIR HANDICAP, THAT IS, SUCH A JOB WHERE WORKING CAPACITY REQUIREMENT COULD BE PROVIDED TO THE FULL-EST POSSIBLE LEVEL. SUFFICIENT OUTPUT IS ACHIEVED TO ALLOW FOR THEM TO EARN THEIR LIVING ON THE BASIS OF THIS SUBSISTENCE, THAT IS, TO DEVELOP WORKING ABILITIES AND FINE-TUNING THOSE AS FAR AS POSSIBLE. ALL THE DISABLED PERSONS' SOCIAL



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# Innovation Trends and the Labour Market

## How Do We Respond to the Needs of People with Disabilities?

### INTRODUCTION: THE IMPACT OF INNOVATION ON THE LABOUR MARKET

International strategic documents on the employment situation and educational integration of people with disabilities highlight the fact that they are less favourable compared to the situation of the non-disabled, active age population. The proportion of people with disabilities within the total population, according to OECD and UN research, is 14-15% (OECD, 2018, ENSZ 2012). Their economic activity differs in various countries, yet half the active age population may be considered inactive (EB, 2010, ENSZ, 2012; ILO, 2017). According to OECD research conducted in 2016, the employment rates of people with disabilities were the best in Iceland, Sweden and Switzerland. These values were the lowest in Hungary, Slovakia and the United States of America (OECD, 2018). Employed people with disabilities are more likely to work in a position with a lower salary, requiring a lower level of education (ENSZ, 2012). Domestic data also shows that the unemployment rate of people with advanced professional expertise, which is of more value in the labour market, is considerably lower compared to those with secondary or lower education. In 2019, the unemployment rate of people aged 15-74 with primary education was 9.7%, while the rate of those with secondary and post-secondary, non-tertiary education was 3% and that of people with tertiary education was only 1.5% (EUROSTAT, 2020). Technological development, and the labour market impact of the knowledge economy based on innovation, appears primarily in enterprises applying more advanced processes and technologies where people with higher levels of higher education are employed (Piva & Vivarelli, 2018). The impact of innovation on the situation of vulnerable social groups in the labour market, especially people with disabilities, is a relevant issue.

Originally, innovation was defined as introducing a new product, creating a new manufacturing process, new market entry in a country's market, raw material procurement or organisational transformation (Keresztes, 2013). Today, however, it has become a widely used term. In addition to economic life and industrial technologies, it is also included in the conceptual set of social sciences, where it has assumed a multidimensional and more complex meaning. The overall introduction of the concept

of innovation and its theoretical definition in the context of economy, sociology and the impact on the development of a capitalist economy may be attributed to Schumpeter (Schumpeter 1980, 1994). In his works he examines how development based on innovation in advanced industrial societies affects both employment and unemployment. According to Schumpeter, innovation ensures the possibility of departing from cyclically changing economic systems and the way in which existing or new goods can be produced at a new level of quality, combining existing resources in a different way (Schumpeter, 1980). Innovation means that an idea not only emerges, but it is also implemented. Schumpeter highlights the realisation of an innovative concept: it is not merely the scientific research or the development itself that is important, but rather the application, the result achieved by the contractor, that becomes economically relevant. So, the effect on the market is what makes a new idea interesting (Schumpeter, 1980). Innovation is not the idea itself, it is the realisation, the spread and the fundamental impulse of the idea, that keeps capitalism in motion. His theory of innovation has an economic and sociological approach, and is not exclusively concerned with products, transport possibilities and new markets, hence it also concerns further organisational changes. This represents more than new ideas, inventions or the birth of a new technology, but is rather about their application for a new product, their combination and introduction to the market, even if this technology already exists. While their implementation is an economic function, it is also more than that, as the resistance of the environment has to be confronted due to the diversity of society's attitudes and preparedness for change. Thus, it is not enough to merely have new inventions, as they need to be put into practice (Schumpeter, 1994). One of Schumpeter's key concepts is that of *creative deconstruction*, which not only involves the deconstruction of the existing combination of economic and technological structures, but also involves the appearance of new and valuable economic and technological combinations. The old capital stock loses its value for lack of innovation, and previous technologies and structures become superfluous, while the new ones become valuable. Although there are social losses, such as unemployment, for which solutions can be found, creative deconstruction results in increased prosperity (Komlos, 2016). There are several technological innovations, achieved by rational science, that create immediate economic profit. They contribute to social and economic development and even if unemployment should occur, it is manageable. In addition, development achieved by innovation involves a departure from the old technology, which is compensated by new jobs. Schumpeter mentions the development of healthcare as an example. Despite not being profit oriented, methods used in hospitals are developed by will power in capitalist rationalism.

# 1. THE INNOVATION ECONOMY AND EMPLOYMENT

New products, such as aeroplanes, televisions and refrigerators, and new, more valuable jobs, were created by the industrial and technological innovations and new technological industries of the 20<sup>th</sup> century. They created unemployment in terms of the traditional, discontinuing industrial technologies. However, working towards a solution to this problem, with sufficient planning, does not necessarily impose an unbearable burden on the capitalist economy. Every prosperous period is followed by more difficult periods, when unemployment rises. This is a cyclic phenomenon, which can change due to political or economic decisions, wage policy, the transformation of the institutional system, or a foreign policy situation. Expenditure on unemployment and supplies does not represent an unmanageable problem in a developed capitalist economy, and there is no need to fear that a steady rise in unemployment will become a lasting feature of the capitalist economy (Schumpeter, 1994). The pace of technological development is accelerating, so its impact on the labour market and the consequences of innovation processes are of great relevance for vulnerable social groups. According to critics, the consequences of creative destruction are that it is precisely those who find it more difficult to succeed in the labour market who suffer the most as a consequence of trends in innovation. In addition to those who benefit, there are numerous people who do not benefit from the evolutionary progress, which is painful (Komlos, 2016). In his study of the economic and social impact of creative destruction, John Komlos cites as an example the downsizing of the large Kodak company, which employed only 8,000 people from its former 145,000 workers by 2014 after recovering from bankruptcy. As a result of creative deconstruction, the media labour market in the United States lost 125,000 jobs in 15 years between 1999 and 2014, creating 212,000 new jobs instead of 424,000. While the impact of economic cycles is slowly reaching the point where the employment rate of disadvantaged workers begins to rise, these workers experience the greatest difficulty in trying to avoid the negative effects of such crises. Advances in technology create a higher need for qualifications to fill new jobs, which can increase the disadvantage of those with lower qualifications. As a result, unemployment caused by technological development may become permanent unless there is a significant change in education and vocational training. As a result of technological advances and innovation, jobless recovery becomes unemployment growth, in which, with the transformation of technologies and production methods, fewer workers can achieve the growth of gross national product, GNP (Brynjolfsson & McAfee, 2012).

Workers with very high incomes and up-to-date and marketable knowledge may choose to spend less time at work and have more free time, while under-skilled workers who lose their jobs or are at a disadvantage due to disability will not benefit from the changes. Overall, both those who benefit and those who do not work less than before, reducing the overall time spent in employment (Brynjolfsson & McAfee, 2014). In a study cited earlier, John Komlos notes that as a result of economic and technological innovations following the 2008 economic crisis, the employment and population ratios in the United States fell by about 5 percentage points from 2008 to 2014. Significantly, 12.5% of the workforce are underemployed, and are thus employed

in positions requiring lower knowledge and shorter working hours than merited by their knowledge, practice, experience and expected job. The growth of GNP has been separated from employment as companies have shifted from human work to robotics, and employees are becoming increasingly redundant due to automation. In his view, the state of permanent underemployment is expected to remain with us in the future, contrary to Schumpeter's original claim (Komlos, 2016).

Studies measuring the impact of innovation on employment are mostly conducted among the companies concerned, which are knowledge-intensive and fast-growing firms in the innovation sector (European Innovation Scoreboard). However, Zimmermann extended his research to 12,000 German companies in the medium and small business sector (Zimmermann, 2009). The main finding of the study is that innovation has a positive impact on employment in both growing and declining small and medium-sized enterprises. However, the situation is more nuanced than this, as innovation has a much stronger impact on the number of employees in companies with stronger growth than in those with slower or weakening growth. The study distinguishes between product and process innovations. According to the analysis, the introduction of new processes or the further development of previous processes has a stronger impact on employment than product innovations. According to Zimmermann, the positive effects of innovation on employment are therefore not limited to a few segments of the economy, and economic policies aimed at strengthening the innovative strength of companies provide a broad incentive for employment (Zimmermann, 2009). Zimmermann examined the companies surveyed on the basis of data from 2003, 2005 and 2006. Of the surveyed enterprises, 55% introduced innovation, 34% applied process innovation related to product production and 46% applied product innovation. The increase in the level of employment of the companies investigated was significant at 4.3% during the period considered. In addition, recent research highlights the importance of analysing the links between technological innovation and employment. While Zimmermann has rather measured the direct impact of innovations and his findings are valid for a shorter period of time, longer-term studies provide a more nuanced picture of the effects of process innovations and product innovations on employment (Piva & Vivarelli, 2019). The study rests on an analysis based on the European Commission's Joint Research Centre (JRC) Scoreboard database. The database included the 1000 most important European (EU) R&D service and industrial companies investing between 2002 and 2013. The study analysed the companies' net sales, capital inflow, R&D expenditure, and employment labour cost data. The positive effect on employment is predominant in high-tech companies, while it is not evident in low-tech companies. Process innovations lead to lower prices and increased investment. If this increases demand and production growth, new jobs may be created, which will compensate for initial job losses. The labour-saving effects of product innovations, and the labour-saving effects of process innovation, are offset by different mechanisms, the effectiveness of which is again weakened by other mechanisms, and these can appear in a variety of different combinations. Thus, they result in different and somehow unpredictable employment outcomes (Piva & Vivarelli 2019, 3). However, the positive findings of the study on higher technology companies also show that less innovative companies, which represent the vast majority of European companies and are more tied to traditional production activities, may not increase their employment (Piva & Vivarelli, 2019, Kancs & Siliverstovs, 2015).

## 2. THE IMPACT OF TECHNOLOGICAL INNOVATION ON THE EMPLOYMENT OF PEOPLE WITH DISABILITIES IN INDUSTRIES RELATED TO STEM (SCIENCE, TECHNOLOGY, ENGINEERING, AND MATHEMATICS)

Fewer people with disabilities have a higher level of education, so they are under-represented in professions and jobs that require greater expertise. However, this is not the only reason why their participation in high-tech industries and services based on technological innovation is proportionally lower than their share of the overall active age population. At the same time, companies with the most advanced technology still employ fewer people with disabilities than non-disabled people with similar qualifications. According to the 2014 ACS PUMS (US Census Bureau's American Community Survey Public Use Microdata Sample) survey, 54% of disabled people with a bachelor's degree in the U.S. are employed, compared to 31% of those with only a high school diploma. In contrast, 84% of non-disabled people between the ages of 21 and 64 are employed (Erickson et al., 2018). The reason may therefore not only be due to the gap in educational attainment related to STEM specialisations. Young people with disabilities face many more barriers than their non-disabled peers, such as negative attitudes from within the environment and the presence of physical barriers. So, even if they are admitted into STEM-type education, many external barriers still exist to businesses that base their activities on technological innovation (Erickson et al., 2018). Out-of-school programmes, strengthening community and social relationships, and using professional and mentoring opportunities all contribute to improving employment opportunities (Erickson et al., 2019). While the employment rate of people with disabilities in high-tech industries lags behind that of traditional industries, we are faced with a paradox of economic participation and prosperity: modern technologies contribute to better work and a better quality of life, while at the same time they can also increase social inequalities by excluding the most vulnerable groups from the higher-income labour market. State-of-the-art technologies and the opportunities provided by the digital world can provide an opportunity to transform employment and labour market structures, but at the same time the possibility of exclusion can further deepen the social and economic gap (Yu et al., 2019). One of the key findings of the 2014 PUMS study is that people with disabilities who have gained a bachelor's degree or higher in STEM courses, which correspond with the needs of state-of-the-art and dynamically developing industries, are much more likely to find themselves unemployed than non-disabled people with similar qualifications. STEM occupations include: engineering, life and physical sciences, mathematics, information technology occupations, social science occupations and architecture while STEM-healthcare occupations include: physicians, nurses, dentists, pharmacists and physiotherapists). As Erikson et al state, 'Individuals with a STEM bachelor's degree with a disability are 3.8 times more likely to be unemployed than individuals without disabilities (13.1% divided by 3.5%). Those in STEM healthcare-related fields are 2.5 times more likely to be unemployed, and those with non-STEM or non-STEM-healthcare-related degrees are 2.7 times more likely to be unemployed' (Erickson et



al., 2019). The benefits of a high level of qualification and up-to-date knowledge only really exist among people with disabilities, yet they are at a disadvantage compared to people with similar qualifications who are not disabled. Knowledge adapted to sectors driven by knowledge and technological innovation does not provide an absolute advantage, and we come to different findings and draw different conclusions regarding the impact of innovation on employment and job retention (Piva & Vivarelli, 2019).

Future changes remain unpredictable and the inherent feature of economic life is uncertainty (Könczei & Zsolnai, 2004). As Könczei and Zsolnai also note, in traditional economics the individual appears as a resource and income-generating factor. People with a disability are ignored in this sense, and their qualities only become relevant if they generate economic benefits and if the company finds a suitable position where their productivity can be optimised and it is worth employing them on the basis of cost-benefit calculation. In this case, as a resource for the company, such employees produce an economic result and are of the same benefit as any other employee. Favourable conditions can be created if public provisions, sanctions and incentives are introduced, if companies are given an advantage by receiving compensation for employment costs, or if employment obligations and economic sanctions are imposed should companies not employ a person with a disability.

### **3. SOCIAL AND PERSON-CENTRED INNOVATION OPPORTUNITIES – PERSON-CENTRED INNOVATION IN INTERNATIONAL DOCUMENTS**

Different perspectives and approaches, procedures and responses to societal needs may all be interpreted as innovations (Nemes & Varga, 2015). At the same time, their application in the social sciences and policies based on them raise the concept to multidimensionality and enter a new field of interpretation. We can examine social innovation on the one hand as a process, a procedure, and on the other hand as a value-based solution for solving a particular problem or challenge, in which business benefits are no longer primary, and moreover we may list processes that change a social value or social structure or an implemented norm (Nemes & Varga, 2015). As defined in EU Regulation 1296/2013 on a European Union Programme for Employment and Social Innovation (amending Decision 283/2010/EU establishing a European Progress Microfinance Facility for Employment and Social Inclusion), social innovations relate to the development and implementation of new ideas and, at the same time, to meeting societal needs and creating new social relationships or collaborations, thereby benefitting society and enhancing society's capacity to act (EaSI, 2013). We have to take into account that the latter definition deals primarily with the concept of innovation at a national and community level, which affects the whole of society or at least its large systems, so we need to narrow the focus of interpretation with regard to small-scale employment and labour market innovations. In particular, the concept of innovation should be narrowed down to practices and complex procedures that achieve the social participation of people with disabilities by facilitating access to employment, taking into account the specific situation of the individual, by breaking



down the characteristics of the environment that concern disability. The European Pillar of Social Rights (EP, EC, 2017) summarises in 20 points the fundamental rights and the resulting courses of action that can work together to increase employment in Europe and increase people's social security. Point 5 on secure and flexible employment calls for support for innovative forms of work that ensure quality working conditions (EP, EC, 2017, 5.c.). The aim of the United Nations Summit on Sustainable Development: Transforming Our World: A Framework for Sustainable Development 2030 Objective 27 is to ensure fair, decent work and build dynamic, sustainable, innovative and people-centred economies for all. There is a strong emphasis on a well-trained workforce equipped with the appropriate knowledge and skills to complete the given tasks and become full members of society (UN, 2015). Point 8 of the document calls for the provision of decent work for all men and women, including people with disabilities (UN, 2015). The overarching goal of the ILO's human-centred agenda (51) is to invest in decent and sustainable work through a people-centred growth and development path. This people-centred growth depends to a large extent on the coordinated operation and synergy of financial and trade policies, which is of paramount importance for the well-being and spiritual development of individuals through decent work. *Trade and financial policies are important means to the material welfare and spiritual development of the person through decent work* (ILO, 2019,56).

The contribution of innovation-led growth to social participation is somewhat questionable. Contrary to the traditional interpretation of poverty, Max-Neef breaks away from the economic approach to poverty, arguing that any unmet basic human need also represents a form of human poverty. Neef identifies nine types of human needs, one of which is participation. Exclusion due to membership of a minority from community relations or from the exercise of a right, such as exclusion from work, also causes poverty (Smith & Max-Neef, 2011). Regardless of the economic situation of people with a disability, if they are unable to participate in the world of work, they can be considered poor. Even if they contribute to economic growth at a macro level, innovation processes can cause exclusion and specific poverty in vulnerable social groups. At the heart of the success of social, labour market and employment innovations lies a proper relationship between employee and decent work and between individuals and their environment.

## SUMMARY

All technological innovations and knowledge-intensive developments that strengthen growth and contribute to improving the efficiency of economies can have an effective social impact insofar as they are accompanied by people-centred and inclusive labour market policies. As employers pay increasing attention to finding and recruiting well-trained workers, it is inevitable that they pay attention to creating an inclusive environment during education, including not only healthy workplaces, but also including knowledge management, career opportunities, universal planning aspects and the use of mentoring programmes (Erickson, 2019, O'Mally et al., 2016).

An inclusive, people-centred approach becomes tangible in a microenvironment. Employers who create an inclusive environment and involve their employees with disabilities in developments and allow their innovation potential to unfold are more

likely to have employees who keep their jobs, who are less likely to face discrimination and are less likely to be hindered in their career development. Only 26% of them feel discriminated against, compared to 41% of those employed elsewhere. In addition, 45% perceive limited career opportunities with an inclusive leader who develops innovation opportunities, while 66% perceive it with a non-inclusive leader (Sherbin et al., 2017).

A person with a disability should not be seen as a factor of production or a mere resource, but primarily as a person who lives in the community, whose economic value is only one among others (Könczei & Zsolnai, 2004). People intrinsically represent a value, and their identity is not based on the degree to which they adapt to their physical environment. It is built on human relationships as an intrinsic value, and its personal relationships are of significance regardless of any economic or social benefit (Goodley, 2019). People who belong to vulnerable social groups can find a job that matches their skills and knowledge, and they can find their path in their career and in society through innovations that favour the person rather than the product or the efficiency of the organisation.

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As SEAMUS HEGARTY ELABORATED: 'IN AN IDEAL WORLD THERE WOULD BE NO SPECIAL SCHOOLS SINCE EVERY CHILD WOULD RECEIVE AN APPROPRIATE EDUCATION IN A LOCAL COMMUNITY SCHOOL. NO COUNTRY IS NEAR ACHIEVING THAT GOAL, APART PERHAPS FROM ITALY, AND IT HAS TO BE ASSUMED THAT SPECIAL SCHOOLS WILL FEATURE ON THE MAP OF SPECIAL EDUCATION FOR SOME TIME TO COME. BUT THAT DOES NOT MEAN THEY CAN CONTINUE UNCHANGED. SPECIAL SCHOOLS HAVE MANY ADVANTAGES — CONCENTRATION OF EXPERTISE IN TEACHING PUPILS WITH VARIOUS DISABILITIES, MODIFIED CURRICULA AND PROGRAMMES OF WORK, ADAPTED BUILDINGS AND EQUIPMENT, TRAINING OPPORTUNITIES FOR STAFF, AND LINKS WITH LOCAL EMPLOYERS AND POST-SCHOOL TRAINING AGENCIES. THESE ARE THE VERY THINGS WHOSE ABSENCE FROM ORDINARY SCHOOLS MAKES THEM INEFFECTUAL IN EDUCATING PUPILS WITH DISABILITIES. THE CHALLENGE TO SPECIAL SCHOOLS THEN IS TO FIND WAYS OF SHARING THEIR EXPERTISE AND RESOURCES, AND OF EMBEDDING THEM IN A WIDER EDUCATIONAL CONTEXT. SOME SPECIAL SCHOOLS HAVE ALREADY BEGUN TO DEVELOP OUTREACH PROGRAMMES. THIS CAN ENTAIL SETTING UP WORKING LINKS WITH NEIGHBOURHOOD ORDINARY SCHOOLS WHERE STAFF AND PUPILS ARE SHARED.'

'SOME SPECIAL SCHOOLS ACT AS RESOURCE CENTRES, PROVIDING INFORMATION AND CONSULTANCY TO LOCAL SCHOOLS, ORGANIZING SUPPORT SERVICES FOR FAMILIES AND CONTRIBUTING TO IN-SERVICE TRAINING ACTIVITIES. DISCHARGING THESE FUNCTIONS SUCCESSFULLY REQUIRES CONSIDERABLE CHANGES WITHIN SPECIAL SCHOOL STAFF. NEW SKILLS MUST BE DEVELOPED AND NEW ATTITUDES FOSTERED. TRANSMITTING A SKILL TO OTHERS IS NOT THE SAME AS EXERCISING IT ONESELF, AND OPERATING ACROSS SEVERAL SCHOOLS OR IN THE COMMUNITY IS VERY DIFFERENT FROM WORKING IN THE CLOSED CONFINES OF A SINGLE SPECIAL SCHOOL.'

'THE MOST IMPORTANT CHANGES REQUIRED ARE ATTITUDINAL: STAFF WHO ARE JEALOUS OF THEIR AUTONOMY AND INTENT ON MAINTAINING LINES OF PROFESSIONAL DEMARCATION WILL NOT SET UP EFFECTIVE COLLABORATION. THERE MUST BE A WILLINGNESS TO MOVE BEYOND EXISTING INSTITUTIONAL BASES AND ANY STATUS THAT MAY GO WITH THEM, AND

TO WORK CO-OPERATIVELY IN WHATEVER NEW STRUCTURES MAY BE ADVISED. THE UPSHOT OF ALL THIS IS THAT SPECIAL SCHOOLS OF THE FUTURE COULD BE VERY DIFFERENT FROM NOW. EMPHASIS WOULD MOVE AWAY FROM EDUCATING LIMITED NUMBERS OF PUPILS IN RELATIVE ISOLATION TOWARDS ACTING AS RESOURCE CENTRES. THE LATTER COULD ENCOMPASS CURRICULUM DEVELOPMENT, IN-SERVICE TRAINING, THE COLLECTION AND EVALUATION OF EQUIPMENT AND COMPUTER SOFTWARE, AND SPECIALIST ASSESSMENT, AS WELL AS ADVICE AND CONSULTATION ON ALL MATTERS RELATING TO THE EDUCATION OF PUPILS WITH DISABILITIES. THESE RESOURCE-CENTRE FUNCTIONS ARE IMPORTANT IN IMPROVING THE STANDARD OF SPECIAL EDUCATIONAL PROVISION REGARDLESS OF WHERE IT IS PROVIDED. BY CAPITALIZING ON AVAILABLE EXPERIENCE AND ESTABLISHING A BANK OF INFORMATION, MATERIALS AND EXPERTISE, THIS OFFERS A POWERFUL MODEL FOR MAKING BEST USE OF FREQUENTLY LIMITED RESOURCES. IF SPECIAL SCHOOLS HAVE TO MAKE CHANGES, ORDINARY SCHOOLS HAVE TO UNDERGO REVOLUTION. ORDINARY SCHOOLS HAVE GENERALLY FAILED PUPILS WITH DISABILITIES AND MAJOR SCHOOL REFORM IS NECESSARY BEFORE THEY CAN MAKE ADEQUATE PROVISION FOR THEM.'

'THIS REFORM MUST OPERATE AT TWO LEVELS: THE ACADEMIC ORGANIZATION AND CURRICULUM PROVISION OF THE SCHOOL AND THE PROFESSIONAL DEVELOPMENT OF STAFF. THE FORMER REQUIRES RETHINKING THE WAYS IN WHICH PUPILS ARE GROUPED FOR TEACHING PURPOSES, THE ARRANGEMENTS THAT SCHOOLS CAN MAKE FOR SUPPLEMENTARY TEACHING AND THE MODIFICATIONS TO THE MAINSTREAM CURRICULUM THAT TEACHERS CAN MAKE SO AS TO GIVE PUPILS WITH DISABILITIES ACCESS TO IT. ALL OF THIS FORCES MAJOR CHANGES IN TEACHER BEHAVIOUR. ATTITUDES, KNOWLEDGE AND SKILLS MUST ALL BE DEVELOPED TO CREATE AND SUSTAIN A NEW KIND OF SCHOOL WHERE THOSE PREVIOUSLY DISENFRANCHISED ARE GIVEN AN EQUAL SAY AND NARROW CONCEPTS OF NORMALITY ARE DISCARDED.' (HEGARTY, 1994, 16). HEGARTY CONTINUES: 'PREPARING PUPILS WITH DISABILITIES FOR ADULT LIFE IS A PARTICULAR CHALLENGE FOR ORDINARY SCHOOLS THAT RUN INTEGRATION PROGRAMMES. MANY SPECIAL SCHOOLS HAVE DEVOTED GREAT EFFORTS TO THIS AREA AND HAVE WELL-ESTABLISHED LEAVERS' COURSES. THEY ALSO BENEFIT FROM THE GREATER CONTROL THEY CAN EXERCISE OVER PUPILS' ENVIRONMENTS AND EXPOSURE TO THE OUTSIDE WORLD. ORDINARY SCHOOL STAFF HAVE TO FIND WAYS OF ENSURING THAT PUPILS DO NOT MISS OUT ON THE SYSTEMATIC PREPARATION THEY WOULD RECEIVE IN A GOOD SPECIAL SCHOOL, AND THEY MUST OFTEN DO SO WITH FEWER RESOURCES AND IN CONTEXTS THAT ALLOW FOR LESS CONTROL.' (HEGARTY, 1994, 45)

THE DEBATE PERSISTS AND HAS GAINED NEW IMPETUS FUELLED BY THE CONTROVERSIAL FINDINGS OF FOLLOW-UP RESEARCH CONDUCTED ON CURRENT EXPERIENCE OF INTEGRATION IN SCHOOLS. A UNICEF INNOCENTI INSIGHT STUDY OF 2005 HIGHLIGHTS THE SITUATION IN CEE/CIS COUNTRIES AND THE BALTIC STATES: 'THE EDUCATION DEBATE IS STILL VERY ACTIVE. THERE ARE ARGUMENTS THAT INTEGRATION OF CHILDREN WITH DISABILITIES INTO MAINSTREAM CLASSROOMS CAN BE A DRAWBACK FOR SOME STUDENTS, BOTH DISABLED AND NON-DISABLED PERSONS. THAT MAY BE A QUESTION OF ADEQUATE RESOURCES — A PERSISTENT AND IMPORTANT ISSUE. THERE IS A CASE IN THE CEE/CIS REGION FOR LINKING SPECIAL EDUCATION SCHOOLS WITH LOCAL MAINSTREAM SCHOOLS TO HELP TO BREAK DOWN THE TRADITION OF SEGREGATION.'

'IN SOME WESTERN COUNTRIES, THERE IS A TREND TO CO-LOCATE SPECIAL SCHOOLS ON THE SAME SITE AS MAINSTREAM SCHOOLS IN THE BELIEF IT PROVIDES THE 'BEST OF BOTH WORLDS'. SERIOUS EFFORTS TOWARDS INTEGRATION ARE BEING MADE IN SOME COUNTRIES, NOTABLY BULGARIA, HUNGARY, ROMANIA AND MACEDONIA.

'WHERE INTEGRATION HAS OCCURRED, IT IS LARGELY ACCOMPLISHED BY BEING AT THE SAME LOCATION AS AND/OR MIXING WITH MAINSTREAM STUDENTS, RATHER THAN INTEGRATED OR INCLUSIVE CLASSROOMS. CURRICULAR INTEGRATION, WHERE CHILDREN WITH DISABILITIES LEARN TOGETHER IN THE SAME CLASSROOMS WITH THE GENERAL STUDENT POPULATION, IS STILL SELDOM SEEN IN THE REGION — AND WHERE IT IS, IT IS OFTEN UNPLANNED AND, THEREFORE, UNSUPPORTED. IN ALBANIA IN 1996, AS THE COUNTRY REPORT NOTES, FOR THE FIRST TIME 'THE INTEGRATION OF PUPILS WITH DISABILITY IN REGULAR SCHOOL' BECAME A DECLARED POLICY GOAL — ALTHOUGH THE DETAILS OF HOW TO DO THIS WERE NOT SPECIFIED. A RECENT SURVEY BY THE ALBANIAN DISABILITY RIGHTS FOUNDATION FOUND THAT THE INTEGRATION OF CHILDREN WITH DISABILITIES WAS QUITE LIMITED AND DONE LARGELY IN RESPONSE TO PRESSURE FROM PARENTS OF CHILDREN WITH MODERATE DISABILITIES. IN HUNGARY, WHERE THE SPECIAL SCHOOL SYSTEM WAS RETAINED, ENROLMENT OF CHILDREN WITH

DISABILITIES IN MAINSTREAM SCHOOLS STARTED SPONTANEOUSLY IN THE MID-1990S. HOWEVER, SCHOOLS 'DID NOT HAVE THE TECHNICAL, PEDAGOGICAL AND CONCEPTUAL CONDITIONS NECESSARY FOR THE INTEGRATED EDUCATION' OF CHILDREN WITH DISABILITIES.

'THE RESISTANCE OF ATTITUDES AGAINST THE INTEGRATION OF CHILDREN WITH DISABILITIES IN MAINSTREAM SCHOOLS CANNOT BE UNDERESTIMATED. IN ECHOES OF THE 'CHARITY' TREATMENT OF CHILDREN WITH DISABILITIES, PARENTS AND OTHERS MAY SUPPORT INTEGRATION ONLY CONDITIONALLY, E.G., THE PROVISIO THAT INCLUDING CHILDREN WITH DISABILITIES IN A REGULAR CLASSROOM DOES NOT DETRACT RESOURCES FROM NON-DISABLED STUDENTS. ADDITIONALLY, THERE IS SUBSTANTIAL PASSIVE RESISTANCE INCUMBENT IN EXISTING EDUCATION SYSTEMS AND OTHER SOCIAL SERVICES.' (UNICEF, 2005, 20).

IN THE LITERATURE WE CAN FIND SEVERAL EXAMPLES: 'ALTHOUGH PARENTS WERE HAPPY WITH THE PROGRESS OF THEIR CHILD AT THE SCHOOL, THEY WERE DISAPPOINTED ABOUT SOCIAL OUTCOMES. THIS WAS IN PART DUE TO THE FACT THAT MANY CHILDREN WITH DISABILITIES CAME BY BUS FROM OUT OF CATCHMENT: THEY HAD TO MAKE A NEW FRIENDSHIP BASE, AND AN OPPORTUNITY FOR CARRYING IT ON OUT OF SCHOOL HOURS.' (AVRAMIDIS, BAYLISS & BURDEN, 2002, 150)

THE UNICEF STUDY CONTINUES WITH A QUOTE FROM THE LITHUANIA COUNTRY REPORT OF 2002: 'POLICY, LAW AND PRACTICE HAVE BEEN LINKED IN LITHUANIA TO MAKE STRONG PROGRESS IN MEETING SPECIAL NEEDS EDUCATION. THE 1991 LAW ON EDUCATION RECOGNIZED THE RIGHT OF CHILDREN WITH SPECIAL NEEDS TO BE EDUCATED IN SCHOOLS CLOSEST TO HOME. SINCE 1991 SCHOOLS STARTED USING MORE RESTRICTIVE CRITERIA FOR ACCEPTING CHILDREN INTO SPECIAL SCHOOLS — A CRUCIAL GATEKEEPING FUNCTION. AMENDMENTS IN 1998 SET OUT DEFINITIONS OF THE ROLE OF PEDAGOGICAL-PSYCHOLOGICAL SERVICES IN ASSESSING SPECIAL EDUCATION NEEDS AND GAVE PARENTS AND CHILDREN THE RIGHT TO CHOOSE THE FORM AND PLACE OF EDUCATION. THE LAW STRESSES INTEGRATED EDUCATION AND THE RIGHT OF PERSONS, EVEN THOSE WITH COMPLEX OR SEVERE DISABILITIES, TO BE EDUCATED.' THE UNICEF STUDY THEN REFERS TO STAFFING ISSUES: 'THE LACK OF TEACHERS WHO ARE ADEQUATELY TRAINED TO WORK WITH CHILDREN WITH LEARNING

